

Title (en)

WIDE POWER RANGE BICYCLE WITH POSITIVE INTUITIVE GEAR SHIFTING SYSTEM

Title (de)

FAHRRAD MIT GROSSEM LEISTUNGSBEREICH UND POSITIVEM INTUITIVGANGSCHALTSYSTEM

Title (fr)

BICYCLETTE À LARGE PLAGE DE PUISSANCE AVEC SYSTÈME DE CHANGEMENT DE VITESSE INTUITIF POSITIF

Publication

**EP 2074014 A4 20091202 (EN)**

Application

**EP 07809464 A 20070611**

Priority

- US 2007013709 W 20070611
- US 45405806 A 20060615

Abstract (en)

[origin: US7293789B1] A pedal lever type bicycle includes a pedal lever having a front portion and a rear portion, with an intermediate pivot point located substantially above the center of the rear wheel, and to the rear of the front of the rear wheel. The rear portion of the pedal lever has dog-leg configuration with a slider that is attached to a drive chain. The slider is mounted on a straight section of the rear portion of the pedal lever which extends slightly above and to the rear of the rear wheel hub, so that the chain exerts a force to move the slider outwardly on the rear portion of the pedal lever when it is in a lower position, and in the opposite direction when it is raised. Changes of mechanical advantage of 3 or 4 to 1 are available with this configuration of the pedal lever. The bicycle incorporates positive intuitive gear controls and quick release mechanisms for all major components of the propulsion system.

IPC 8 full level

**B62M 1/08** (2006.01); **B62M 1/24** (2013.01); **B62M 9/04** (2006.01)

CPC (source: EP US)

**B62M 1/28** (2013.01 - EP US)

Citation (search report)

- [XY] WO 8301764 A1 19830526 - EFROS BORIS
- [XD] US 4666174 A 19870519 - EFROS BORIS [US]
- [IJ] US 4574649 A 19860311 - SEOL MAN T [KR]
- [YA] US 4300784 A 19811117 - EFROS BORIS
- [AD] WO 8002406 A1 19801113 - ENERGENIC PROPULSIONS LTD [US]
- [A] US 4666173 A 19870519 - GRAHAM GARNARD E [US]
- See references of WO 2007146242A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

**US 45405806 A 20060615**; CY 141100920 T 20141105; DK 07809464 T 20070611; EP 07809464 A 20070611; ES 07809464 T 20070611; PL 07809464 T 20070611; PT 07809464 T 20070611; SI 200731551 T 20070611; US 2007013709 W 20070611